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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 99-383-B1)

In re Application of:)	
)	
John W. Belmont et al.)	Examiner: Unassigned
)	
Serial No.: 10/803,738)	
)	Group Art Unit: 1651
Filing Date: March 18, 2004)	
)	
For: Phosphatases Which Activate Map)	Confirmation No.: 8046
Kinase Pathways)	

TRANSMITTAL LETTER

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

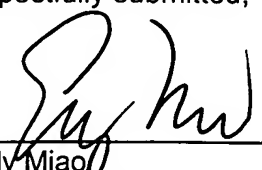
In regard to the above identified application,

1. We are transmitting herewith the attached:
 - a) Fifth Supplemental Information Disclosure Statement;
 - b) U.S. PTO 1449 Form with copy of 36 references; and
 - c) Postcard.
2. With respect to fees:
 - a) No fee is required.
 - b) Please charge any underpayment or credit any overpayment our Deposit Account, No. 13-2490.
3. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 7 day of October, 2005.

Respectfully submitted,

Date:

Oct. 7, 2005



Emily Miao
Registration No. 35,285



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FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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Alexandria, VA 22313-1450

Sir:

In order to comply with discretionary regulations 37 CFR §§1.97 and 1.98, attached hereto is Form PTO-1449, copies¹ of the documents listed thereon. These documents contain information which the Examiner may consider to be important in deciding whether to allow the present application to issue as a patent.

1. Lähdevirta et al., "Elevated Levels of Circulating Cachectin/Tumor Necrosis Factor in Patients with Acquired Immunodeficiency Syndrome" *Am. J. Med.*, Vol. 85, pp. 289-291 (1988)
2. Leder et al., "Consequences of Widespread Deregulation of the c-myc Gene in Transgenic Mice: Multiple Neoplasms and Normal Development" *Cell*, Vol. 45, pp. 485-495 (1986)

¹To the extent that a document is listed and no copy of same is attached, then such document is not at the present time available to the undersigned or is available in the file of a parent application. If a listed document is not in the English language and an English translation is readily available, such translation is also attached; if translation is not attached it is not readily available to the undersigned. If a foreign language patent document is cited, and an English language equivalent is known to the undersigned, then such equivalent patent is also cited on the attached form along with the corresponding foreign language patent and a connecting arrow indicated therebetween; if no such English language equivalent is cited, then none is known to undersigned.

3. Luckow et al., "Efficient Generation of Infectious Recombinant Baculoviruses by Site-Specific Transposon-Mediated Insertion of Foreign Genes into a Baculovirus Genome Propagated in *Escherichia coli*" *J. Virology.*, Vol. 67, pp. 4566-4579 (1993)
4. Labastie et al., "Molecular Identity of Hematopoietic Precursor Cells Emerging in the Human Embryo" *Blood*, Vol. 92, pp. 3624-3635 (1998)
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7. Liu, et al., "Tumor Necrosis Factor- α Expression in Ischemic Neurons," *Stroke*, Vol. 25, No. 7, pp. 1481-1488 (1994)
8. Marks, et al., "By-passing Immunization: Human Antibodies from V-gene Libraries Displayed on Phage" *J. Mol. Biol.*, Vol. 222, pp. 581-597 (1991)
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11. Merrifield, R.B., "Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide" *J. Am. Chem. Soc.*, Vol. 85, pp. 2149-54(1963)
12. Magram et al., "Development regulation of a cloned adult β -globin gene in transgenic mice" *Nature*, Vol. 315, pp. 338-40 (1985)
13. Morrison, et al., "Chimeric human antibody molecules: Mouse antigen-binding domains with human constant region domains" *Proc. Natl. Acad. Sci., U.S.A.*, Vol. 81, pp. 6851-6855 (1984)
14. Nemoto et al., "Opposing Effects of Jun Kinase and p38 Mitogen-Activated Protein Kinases on Cardiomyocyte Hypertrophy" *Mol. Cell. Biol.*, Vol. 18(6), pp. 3518-3526 (1998)
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18. Ramirez et al., "The MEKK-JNK Pathway Is Stimulated by α -Adrenergic Receptor and Ras Activation and Is Associated with *in Vitro* and *in Vivo* Cardiac Hypertrophy" *J. Biol. Chem.*, Vol. 272 No. 22, pp. 14057-14061 (1997)
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23. Silberbach et al., "Extracellular Signal-regular Protein Kinase Activation Is Required for the Anti-hypertrophic Effect of Atrial Natriuretic Factor in Neonatal Rat Ventricular Myocytes" *J. Biol. Chem.*, Vol. 274, No. 35, pp. 24858-24864 (1999)
24. Swift et al., "Tissue-Specific Expression of the Rat Pancreatic Elastase I Gene in Transgenic Mice" *Cell*, Vol. 38, pp. 639-646 (1984)
25. Jaffredo et al., "Intraaortic hemopoietic cells are derived from endothelial cells during ontogeny" *Development*, Vol.125, pp. 4575-4583 (1998)
26. Thomas et al., "Site-Directed Mutagenesis by Gene Targeting in Mouse Embryo-Derived Stem Cells" *Cell*, Vol. 51, pp. 503-512 (1987)
27. Thomas et al., "High Frequency Targeting of Genes to Specific Sites in the Mammalian Genome" *Cell*, Vol. 44, pp. 419-428 (1986)
28. Verhoeyen et al., "Reshaping Human Antibodies: Grafting an Antilysozyme Activity" *Science*, Vol. 239, pp. 1534-1536 (1988)
29. Villa-Kamaroff et al., "A bacterial clone synthesizing proinsulin" *Proc. Natl. Acad. Sci. U.S.A.*, Vol. 75, pp. 3727-3731 (1978)
30. W. Nürnberg, et al., "DIG-Labeled RNA In Situ Hybridization Without Coverslipping," *Biotechniques*, Vol.18, pp. 406-410 (1995)
31. Wagner et al., "Nucleotide sequence of the thymidine kinase gene of herpes simplex virus type 1" *Proc. Natl. Acad. Sci. U.S.A.*, Vol. 78, pp. 1441-1445 (1981)
32. Wang et al., "Cardiac Hypertrophy Induced by Mitogen-activated Protein Kinase Kinase 7, a Specific Activator for c-Jun NH₂-terminal Kinase in Ventricular Muscle Cells" *J. Biol. Chem.*, Vol. 273, No. 10, pp. 5423-5426 (1998)
33. Ip et al., "Signal transduction by the c-Jun N-terminal kinase (JNK) – from inflammation to development" *Curr. Opin. Cell Biol.*, Vol. 10, pp. 205-219 (1998)

34. Yamamoto, et al., "Identification of a Functional Promoter in the Long Terminal Repeat of Rous Sarcoma Virus," *Cell*, Vol. 22, pp. 787-797 (1980)
35. Yano et al., "Differential Activation of Cardiac c-Jun Amino-Terminal Kinase and Extracellular Signal-Regulated Kinase in Angiotensin II-Mediated Hypertension" *Circ. Res.*, Vol. 83, No. 7, pp. 752-760 (1998)
36. Jurecic, et al., "Differential mRNA display using anchored oligo-dT and long sequence-specific primers as arbitrary primers," *TIG*, Vol. 12, No. 12, pp. 502-504 (1996)

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

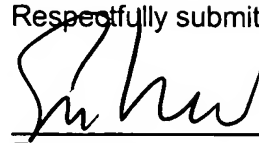
The present Disclosure Statement is being submitted in compliance with 37 CFR 1.56 insofar as an Examiner might consider any of the cited documents important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner, in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104(a) and 1.106(b) and, in the course of each search, will review for relevance every document cited on the attached form even if not initialed.

Early and favorable consideration is earnestly solicited.

Dated: Oct. 7, 2005

McDonnell Boehnen Hulbert & Berghoff
300 South Wacker Drive
Chicago, Illinois 60606
Telephone : (312) 913-0001
Facsimile: (312) 913-0002

Respectfully submitted,



Emily Miao

Registration No. 35,285

FORM PTO-1449
(Rev. 2-32)U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

99-383-B1

Serial No.

10/803,738

FIFTH SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

John W. Belmont et al.

Filing Date:

March 18, 2004

Group:

1651

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes	Translation No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

1.	Lähdevirta et al., "Elevated Levels of Circulating Cachectin/Tumor Necrosis Factor in Patients with Acquired Immunodeficiency Syndrome" <i>Am. J. Med.</i> , Vol. 85, pp. 289-291 (1988)
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